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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,809	04/01/2004	Dawn Melman	044499-0200	5310

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EXAMINER	
NGUYEN, HOANG V	

ART UNIT	PAPER NUMBER
2821	

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/814,809	MELMAN, DAWN	
	Examiner	Art Unit	
	Hoang V. Nguyen	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15-20* is/are allowed.

6)☒ Claim(s) *1-7 and 10-14* is/are rejected.

7)☒ Claim(s) *8 and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/15/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita (US 4,788,613).

Regarding claim 1, the coil structure of Yamashita (Figures 1-5) would enable the method of making a device comprising the steps of winding a coil 8; disposing the coil in a predetermined position on a component 3 which forms part of the device 1; connecting the ends of the coil to first and second pins 6 by winding the ends of the coil onto the pins; and disposing the first and second pins in electrical connection with first and second connection structures 15 formed on a printed circuit board 14 which is disposed on the component.

Regarding claim 2, as applied to claim 1, Figure 4 of Yamashita shows that a first end of a wire used to form the coil is wound onto the first pin before the wire is wound into the coil.

Regarding claim 3, as applied to claim 1, Figure 4 of Yamashita shows that the component 3 is a molded body and wherein the steps of disposing the coil, connecting the ends of the coil to the first and second pins and the step of disposing the first and second pins in the first and second connecting structure, are all carried out in absence of overmolding of any part of the coil once disposed on the molded body.

Regarding claim 4, as applied to claim 1, Yamashita (col 3, lines 10-12) teaches that the ends of the coils are soldered to the pins.

Regarding claim 5, as applied to claim 1, Figure 4 of Yamashita would enable the step of soldering the pins to the connection structures of the PCB.

Regarding claim 6, as applied to claim 5, Figure 4 of Yamashita would enable the step of soldering the ends of the coils to the pins and the step of soldering the pins to the connection structures on the PCB are being carried out after the ends of the coil have been wound on the pins and the pins have been disposed in position with respect to the PCB so that the pins are in contact with the connection sites.

Regarding claim 7, as applied to claim 1, Figure 4 of Yamashita would enable the step of winding the coil on the bobbin which is separate from the component.

Regarding claim 10, the coil structure of Yamashita (Figures 1-5) would enable the method of making a device comprising winding a coil 8; connecting a first end of the coil to a first pin 6; disposing the coil in a predetermined position on a component 4 which forms part of the device; connecting a second end of the coil to the second pin 6; disposing the first pin in a first predetermined position on a PCB which is disposed in the device with the component; and disposing the second pin in a second predetermined connection position on the PCB.

Regarding claim 11, as applied to claim 10, Figure 4 of Yamashita shows would enable the step of winding the coil being carried out on a form 3 and disposed in the device and wherein the step of connecting the first end of the coil to the first pin; connecting the second end of the coil to the second pin; disposing the first pin in the predetermined position and the step of

disposing the second pin in the second predetermined connection position are carried out in absence of a molding process wherein the coil is overmolded.

Regarding claim 12, as applied to claim 11, Figure 4 of Yamashita shows that the form is a bobbin.

Regarding claim 13, as applied to claim 10, Figure 4 of Yamashita would enable the step of connecting the ends of the coil to the first and second pins by winding the ends of the coil onto the first and second pins; and disposing the first and second pins in the connection positions further comprises soldering the first and second coil ends to the first and second pins and soldering the first and second pins to electrical connection structures associated with the first and second connection positions.

Regarding claim 14, as applied to claim 10, Figure 4 of Yamashita would enable the step of soldering the first and second coil ends to the first and second pins and the soldering of the first and second pins to the first and second connection sites being carried out while the pins are *in situ* in the first and second connection sites.

Allowable Subject Matter

3. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 15-20 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 8 and 9, the coil structure of Yamashita would enable the method of making a device comprising the steps of winding a coil; disposing the coil in a predetermined position on a component which forms part of the device; connecting the ends of the coil to first and second pins by winding the ends of the coil onto the pins; and disposing the first and second pins in electrical connection with first and second connection structures formed on a printed circuit board which is disposed on the component. Yamashita, however, fails to specifically teach that that the molded body is used in an automotive vehicle.

Regarding claims 15 and 16, the coil structure of Yamashita would enable the method of making a device comprising the steps of molding first and second components; forming a coil; disposing the coil on the first component without overmolding the coil; disposing a printed circuit board on one of the first and second components; connecting the first and second ends of the coil to the PCB to establish first and second electrical connections between the coil and the PCB. Yamashita, however, fails to specifically teach that the coil is an antenna coil and the step of coupling the first and second components together to enclose the non-overmolded coil.

Regarding claims 17-20, Yamashita discloses a device comprising first and second components; a non-overmolded coil which is disposed on one of the first and second molded components; a printed circuit board disposed with one of the first and second components and connected to the coil via first and second pins which have first and second ends of the coil wound therearound and soldered thereto, and wherein the first and second pins are soldered to first and second connection structures on the PCB. Yamashita, however, fails to specifically teach that the coil is an antenna coil.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US 2004/0145449 A1 discloses a key operated antitheft device.
- US 2005/0104707 A1 discloses a coil and PCB assembly.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang V. Nguyen whose telephone number is (571) 272-1825. The examiner can normally be reached on Mondays-Fridays from 9:00 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Nguyen can be reached on (571) 272-1825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hvn
8/10/05

HOANG V. NGUYEN
PRIMARY EXAMINER